

### REMARKS

The comments of the applicant below are each preceded by related comments of the examiner (in small, bold type).

In reference to applicant's Supplemental Information Disclosure Statement, the subject declarations identified in the instant IDS were not provided and hence the subject IDS will not be considered but will be placed in the applicant's file.

In reference to page 1, third paragraph of the Supplemental Information Disclosure Statement, it is not the policy for an Examiner of a given application to review the efforts of another application notwithstanding the invitation of the Applicant to do so. If "other material" should be the subject of a review in the instant application, then the Applicant should make such material available to the Examiner for review.

The applicant has submitted additional materials.

#### *Claim Objection*

Claim 2 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Derived, constructed and transformed variables are one and the same ... derived variables are defined as constructed and transformed variables and therefore do not further limit the referenced independent claim limit (specification, page 1 :27-28).

The applicant has amended claim 2.

Claims 1-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Cabena *et al.* (IBM, Intelligent Miner for Data Applications Guide, referred to as Cabena). Examiner's Opinion: the prior art of Cabena when associated with fl 15. below applies. Considering that the rejection of the claims is made under § 102, MPEP 2131.05 applies. The prior art of Cabena is quite extensive and with the considerations of fl '1 5. below and MPEP 2131.05, the Examiner encourages the applicant to thoroughly review the response to this office action.

#### **Claim 1**

Cabena anticipates providing a graphical user interface that enables a user of a model generation tool (Cabena, Pages 21, 22, Fig. 8; Examiner's Note (EN): 7 15. applies; screen shot of a GUI is shown in Fig. 8) to view and manage subgroups of contributory and non-contributory variables associated with generation of a predictive model (Cabena, Page 90:Z-3; Page 118, 77.3.3.2; Fig. 8; EN: applicant has not defined the terms contributory or non contributory variables; specification at page 33:9-10, states "the analyst progresses by choosing the prediction method (and the criteria to exclude non-contributory variables) ..." which is anticipated by Cabena at page 118, 77.3.3.2 with the statement "we selected the variables indicated by the decision tree to be important predictors of defection"; making a selection means that variables were viewed and managed for inclusion -exclusion) including source variables associated with attributes of the original data and derived variables

**subsequently modified from the source variables (Cabena, Page 91:2-3; EN: Cabena's objective (source) variable is based on historical data and the response (derived, constructed, transformed) variable is the result of the model's prediction).**

Cabena did not describe and would not have made obvious "one of the subgroups being identified as containing variables that are contributory and another subgroup being identified as containing variables that are non-contributory", as recited by claim 1. Although Cabena does select variables indicated by a decision tree to be important predictors of defection (see, Cabena, page 118, section 7.3.3.2), Cabena's variables are not in subgroups identified as containing contributory variables or non-contributory variables. Cabena's decision tree lists variables that are all meaningful for the problem Cabena is dealing with (see, *Id.*, page 120, section 7.4.1 and page 121, first line) but does not identify subgroups of variables, let alone identifying subgroups as "containing variables that are contributory" or "non-contributory".

**Claim 7**

**Cabena anticipates in connection with a project in which a user generates a predictive model based on historical data about a system being modeled, enabling the user through a graphical user interface to manage and view information about distributions and interactions on strengths of measurement of predictor variables associated with the data (Cabena, Page 21, Fig. 8; Page 23, Fig. 9; page 33, 4.1; Fig. 59; EN: Cabena on page 121 addresses strength of measurement related to training results which is directly related to "interactions based on strengths of measurement of predictor variables associated with the data").**

Cabena did not describe and would not have made obvious a distribution of predictor variables "being determined based on strength of measurement of the predictor variables", as recited by claim 7. Rather, Cabena uses training and test results to indicate a distribution of values, e.g., positive or negative events, of a particular target variable. As Cabena explains:

Figure 60 on page 122 shows the gains chart for both training and test for the decision tree. The training results are very smooth, indicating monotonicity in the distribution of the target variable positive events by descending leaf node score. The training result has a lift ratio of 1.75 times random at 20% of the customer population. The test gains curve has a higher lift ratio of 3.3 at 20%. This improvement is due to the use of stratified sampling in the training mode. The problem with the test mode is the severe waviness of the gains curve in the top portion of the curve. This is due to either a biased training sample (because of a small sample of negative target events) or some effect that the model was missing. The former explanation is the most probable. (*Id.*, page 121.)

Accordingly, Cabena determines the distribution of the values of the target variable based on training and test results but did not describe and would not have made obvious determining

"based on strength of measurement of predictor variables", a distribution of the predictor variables, as recited by claim 7.

All of the dependent claims are patentable for at least the reasons for which the claims on which they depend are patentable.

Canceled claims, if any, have been canceled without prejudice or disclaimer.

Any circumstance in which the applicant has (a) addressed certain comments of the examiner does not mean that the applicant concedes other comments of the examiner, (b) made arguments for the patentability of some claims does not mean that there are not other good reasons for patentability of those claims and other claims, or (c) amended or canceled a claim does not mean that the applicant concedes any of the examiner's positions with respect to that claim or other claims.

The fees in the amount of \$525 for the Petition for Extension of Time and \$25 for an extra claim are being paid on the electronic filing system by way of deposit account authorization. Please apply any other charges or credits to deposit account 06-1050, referencing attorney docket 17146-006001.

Respectfully submitted,

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